3.11 Traffic/Transportation

This section provides a description of the transportation setting and assesses the potential circulation impacts associated with the implementation of the proposed project.

3.11.1 Affected Environment

3.11.1.1 Transit Operations

The Golden Gate Transit Authority is one of the primary providers of local and commuter transit service in the project area, with local and express buses that link Santa Rosa with other points in Sonoma County, with Marin County, and with San Francisco. Sonoma County Transit and the Santa Rosa City Bus system provide other local transit within the project area. Greyhound buses and AMTRAK buses provide interregional service. Greyhound provides transit service both within and outside of the Route 101 corridor. AMTRAK provides access to train service through a feeder bus that collects passengers at stops along the Route 101 corridor, including Santa Rosa, then connects to the Martinez train station in Contra Costa County.

Currently, there is no passenger train service within Sonoma County. However, providing train service on the existing NorthWestern Pacific rail line has been evaluated in several reports, for instance in the June 1997 Sonoma/Marin Multi-Modal Transportation and Land Use Study produced by Calthorpe Associates. Within the project area, the NorthWestern Pacific Rail line runs parallel to the west side of Route 101. The rail line currently has limited goods freight service between Healdsburg in Sonoma County and Novato in Marin County (Caltrans 1999b).

3.11.1.2 Bicycle and Pedestrian Facilities

Bicycle/pedestrian facilities in the project vicinity are on Veterans Avenue, 9th Street, 7th Street, 3rd Street and on Route 12 west of Route 101, as well as adjacent to Santa Rosa Creek along the Prince Memorial Greenway. There are also two pedestrian over crossings near the project area. Both are located adjacent to the Route 101/SR-12 interchange. One is located over the northern Route 101/SR-12 ramps and connects the Burbank Elementary School with a residential area. The other, just south of the project limits, is located over the southern Route 101/SR-12 ramps and connects South Davis Park with a residential and commercial development area.

Future bicycle/pedestrian facilities are planned for 3rd Street, Santa Rosa Avenue, College Avenue, Steele Lane, Cleveland Avenue, Morgan Street, and Armory Drive (Dyett & Bhatia 2001). Also, both the Marin County and Sonoma County Bicycle Coalitions have initiated the process of consolidating a bicycle/ pedestrian trail adjacent to the existing NorthWestern Pacific rail line from San Rafael in Marin County north to Cloverdale in Sonoma County. There are no bicycle or pedestrian designations along Route 101 in the project area as both are not permitted activities along this very busy freeway.

3.11.1.3 Parking

There is a Park and Ride lot in the project vicinity near Brookwood Avenue and SR-12 (east of Route 101). Also, approximately 145 parking spaces are located under the viaduct section of Route 101 in downtown Santa Rosa. This parking area is leased to the City by Caltrans for use by patrons of the Railroad Square area.

3.11.1.4 Existing Traffic Conditions

Route 101 is the primary north/south freeway in Santa Rosa and Sonoma County. Currently, Route 101 within the project area is a four-lane divided freeway with 3.6 m (12 ft) lanes, an inside shoulder width of 1.5 m (5 ft), and an outside shoulder width of 2.4 m (8 ft). The median is unpaved and partially landscaped.

Route 101 Operations. Existing travel delay resulting from bottlenecks on southbound Route 101 between River Road in Fulton and Route 116 in Cotati is approximately seven minutes during the AM peak period and approximately nine minutes during the PM peak period, according to 1999 studies. The 1999 Congestion Monitoring Studies also show congestion north of River Road in the morning peak period. Northbound, existing travel delay on Route 101resulting from bottlenecks in the same limits is approximately nine minutes during the AM peak period and approximately 12 minutes during the PM peak period (Caltrans 2001a).

Intersection Operations. The City of Santa Rosa strives to keep the delay experienced by vehicles at less than 55 seconds per vehicle along all major corridors. Intersection traffic congestion is expressed in terms of Level of Service (LOS), and a delay of 55 seconds or less corresponds to LOS D or better. All study area intersections were at LOS D or better as of Year 2000 (Caltrans 2001a).

3.11.1.5 Roadway Network Assumption

To predict highway operations in Year 2010, Caltrans assumed that existing highway facilities would still be in place, supplemented by all the highway projects currently

under construction and local projects that are listed in the most recent (2001) Regional Transportation Plan (RTP) as committed funding status and projects listed in the 2001 Transportation Improvement Program (TIP). Below is the list of projects that may affect traffic flow within the project area (Caltrans 2001a).

- Rohnert Park Expressway interchange modification
- Stony Point Road widening
- Farmers Lane interchange modification/reconstruction
- Route 101 HOV widening from Wilfred Avenue north to SR-12, opened to traffic November 2002
- Route 101 HOV gap closure project from Corte Madera to San Rafael in Marin County
- Wilfred Avenue interchange modification and Route 101 HOV widening from Rohnert Park Expressway north to Wilfred Avenue

Predictions of traffic conditions both on the freeway and in the intersections are based on the assumption that these highway projects are completed.

For Year 2030 highway operations analyses, Caltrans assumed that all the same facilities from the Year 2010 roadway network assumption are in place. Additional projects within the traffic study area assumed to be in place by 2030 are:

- Widen Route 101 from 4 lanes to 6 lanes (including HOV lanes) from Route 37 in Marin County to Old Redwood Highway in Petaluma;
- Route 101 HOV widening from the Rohnert Park Expressway interchange to Old Redwood Highway north of Petaluma; and
- Route 101 HOV widening from north of the Steele Lane interchange to Windsor River Road.

3.11.1.6 Future Traffic Conditions Without Addition of HOV Lanes in Project Area: Year 2010

Route 101 Operations. Southbound travel delay on the two existing mixed flow lanes would approach 16 minutes during the AM peak period and nearly nine minutes during the PM peak period by Year 2010. The maximum delay calculated for HOV vehicles would exceed 12 minutes during the AM peak period and approach 8 minutes during the PM peak period by Year 2010 (Caltrans 2003b). Figure 3.11-1 shows locations of traffic congestion and the extent of delays in 2010 if the highway capacity in the project area remains the same.

Intersection Operations. The intersections between freeway ramps and Steele Lane and between freeway ramps and College Avenue are forecast to have control delays of less than 55 seconds per vehicle in Year 2010, which corresponds to Level of Service D or better.

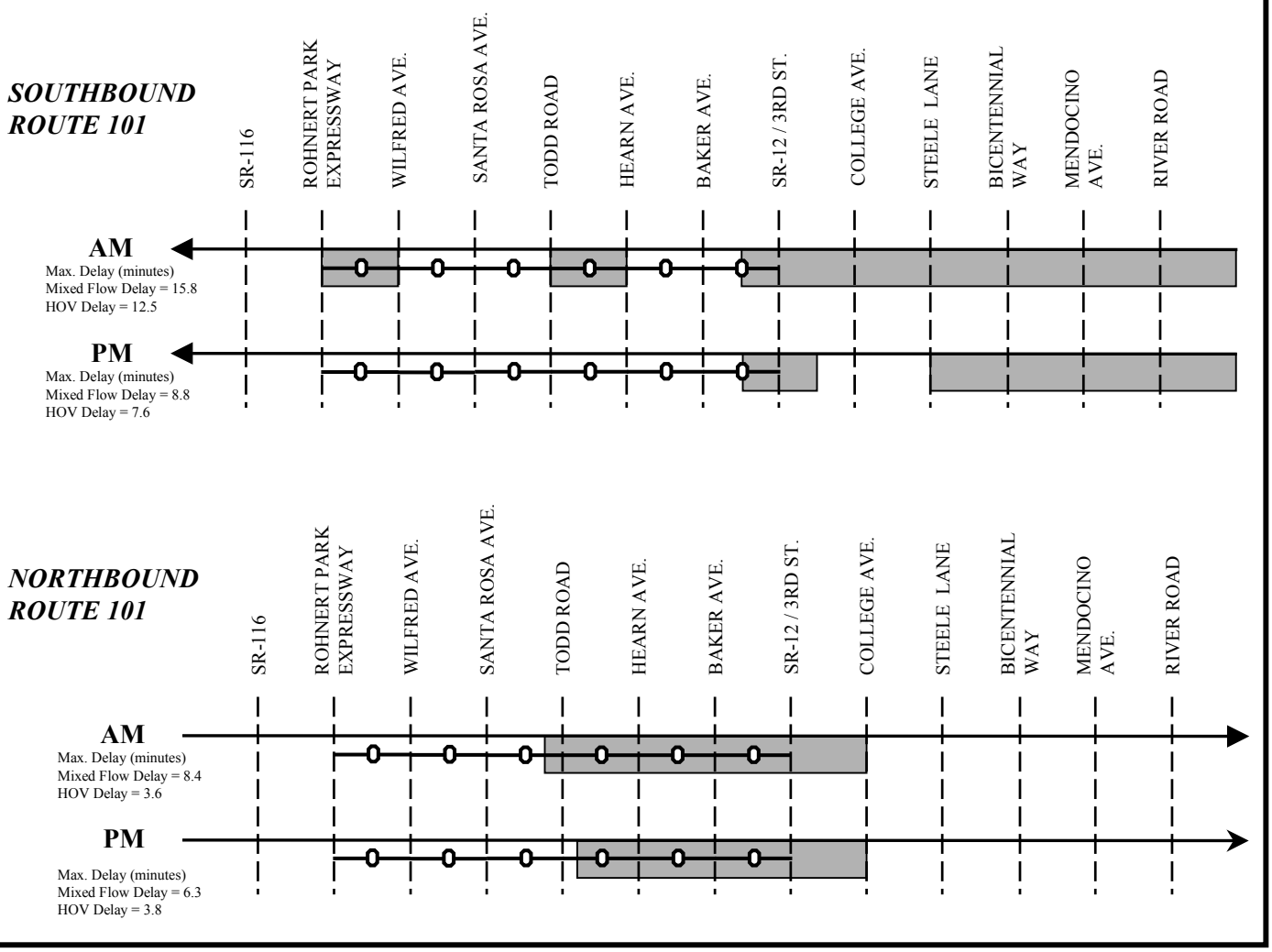
3.11.1.7 Future Traffic Conditions Without Addition of HOV Lanes in Project Area: Year 2030

Route 101 Traffic Congestion. Traffic is expected to increase noticeably in the project area between Years 2010 and 2030 and would result in heavier congestion and higher Year 2030 delays for mixed-flow lane traffic. In any segments where HOV lanes did not exist, High Occupancy Vehicles would also suffer longer delays in 2030.

According to the assumptions that went into predicting traffic conditions if the HOV lanes are not added, the project area, which extends between the Route 12 and Steele Lane interchanges, would be the only segment of Route 101 within the study limits that would not have an HOV lane constructed by the Year 2030. HOV lane users in the study area would be able to bypass most congestion in the Santa Rosa area, except between Route 12 and Steele Lane. In the P.M. peak hour, southbound HOV lane users would experience maximum delays of about 12 minutes. During the same P.M. peak hour, southbound mixed-flow lane vehicles would experience delays up to 36 minutes. Motorists travelling southbound in the A.M. peak hour could expect shorter maximum delays, with about 4 minutes for HOV –lane users and about 25 minutes for mixed-flow traffic.

Northbound travellers in the A.M. peak hour would experience maximum delays of 13 minutes for mixed-flow lane users and about 6 minutes for HOV-lane users. In the P.M. peak hour, the maximum delays for northbound mixed-flow lane users would be 35 minutes, and for HOV lane users, about 13 minutes.

Figure 3.11-2 shows locations of expected traffic congestion and the extent of delays in 2030 if the highway capacity remains as assumed.



Drawing not to Scale

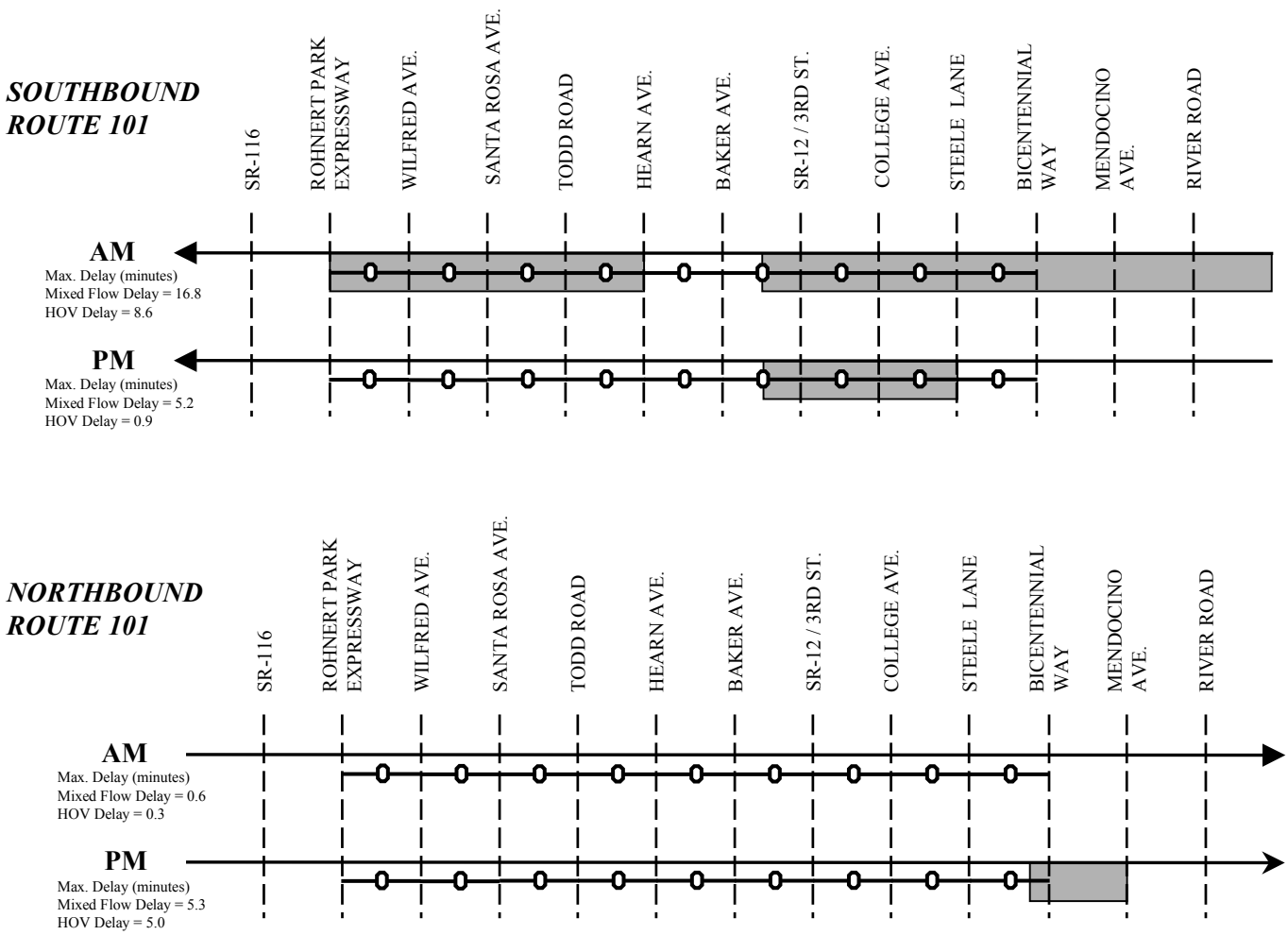
LEGEND

Congestion Area*

High Occupancy Vehicle Lane

Figure 3.11-1
2010 No Build Scenario
Route 101 Congestion Analysis

* For congestion analysis, the congestion threshold is reached when demand volumes exceed capacity of 2100 vehicles per hour per lane.



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LEGEND

Congestion Area*

High Occupancy Vehicle Lane

Figure 3.11-2
2010 With Proposed Project Scenario
Route 101 Congestion Analysis

* For congestion analysis, the congestion threshold is reached when demand volumes exceed capacity of 2100 vehicles per hour per lane.

Intersection Operations. The Year 2030 analysis of the Steele Lane and College Avenue interchanges for this scenario assume that the interchanges are configured as they exist now. With Year 2030 traffic demand, motorists would experience Level of Service F, indicating a delay of greater than 80 seconds per vehicle, in two scenarios; during the P.M. peak at the intersection of College Avenue and the ramps to and from southbound Route 101, and during the P.M. peak at the intersection of Steele Lane and the northbound 101 ramps. Level of Service E, with delays between 36 and 55 seconds per vehicle, would be experienced in three scenarios: A.M. and P.M. peak periods at the intersection between College Avenue and the ramps to and from northbound Route 101, and in the morning peak at the intersection of Steele Lane and the southbound Route 101 ramps.

3.11.2 Environmental Consequences

3.11.2.1 Transit Operations

Implementation of the proposed project would not impact transit service within the project area. In fact, bus transit service would be enhanced by the proposed project, especially during the busy AM and PM peak commuting periods, by providing more freely-flowing HOV lanes. Implementation of HOV lanes on Route 101 would allow buses and carpools to bypass congested mixed flow traffic lanes through Santa Rosa, resulting in an improvement in travel times during the peak commuting periods.

3.11.2.2 Bicycle and Pedestrian Facilities

The proposed project would leave the pedestrian overcrossing at Burbank School in place until the new bicycle/pedestrian under crossing adjacent to the Santa Rosa Creek is completed. Still, it is likely that some construction activities would temporarily impact pedestrians' access to the overcrossing or under crossing. Route

101 currently crosses Santa Rosa Creek using separate bridges for the northbound and the southbound lanes, which allows light to pass through the gap between the two parallel bridges. If the proposed project is constructed, the gap would be closed when the two bridges are replaced with one unified bridge. This would make it darker under the new, wider bridge. Caltrans is addressing concerns about safety for users of the bicycle/pedestrian path under the bridge with design features to improve visibility, as described in Section 3.11.3.2.

When Route 101 was made into a freeway through Santa Rosa, bicycle/pedestrian access from the west side residential areas to the downtown area was severed at

multiple locations. As part of the proposed project, the bicycle/pedestrian facilities at 3rd Street are proposed to be enhanced and new bicycle/pedestrian facilities are scheduled to be added at 6th Street, College Avenue, and Steele Lane to provide better connectivity within the downtown Santa Rosa area. The enhancement/construction of these bicycle/pedestrian facilities would provide additional pathways for City residents to reach the downtown area.

3.11.2.3 Parking

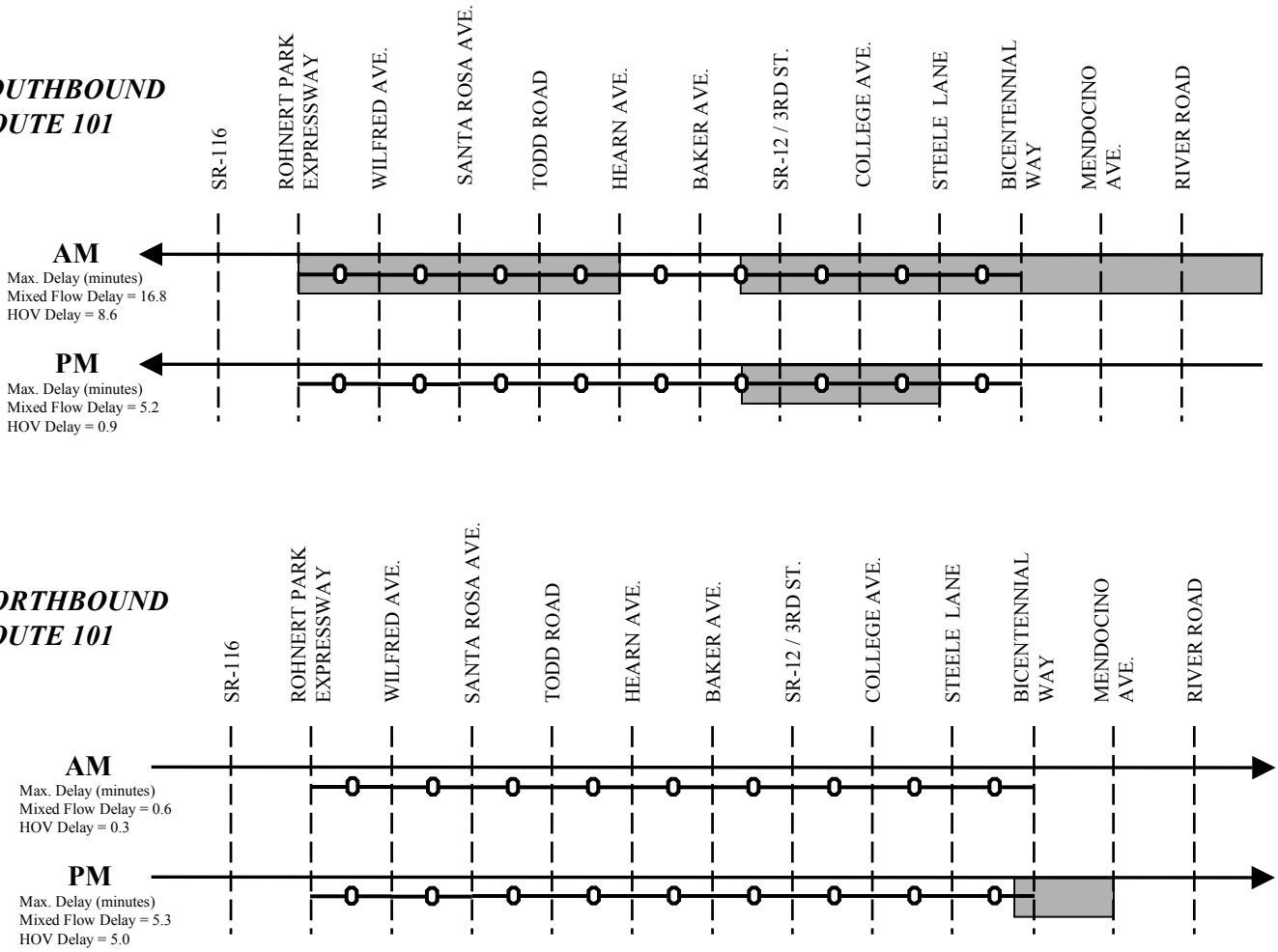
The parking area currently located under the viaduct section of Route 101 would be temporarily impacted by construction of the proposed project. The widening of the viaduct bridge structure would force the temporary closing of this surface parking lot for safety reasons. When construction of the proposed project is completed, the parking area under the viaduct would be reopened. Caltrans is working with the City of Santa Rosa to identify an alternative parking area during construction. As much parking as possible would be maintained during the construction period.

In the long term, the project would add parking spaces along the west side of Morgan Street. The project would remove some office and commercial buildings there and expand the existing parking areas in their place.

3.11.2.4 Future Traffic Conditions on Route 101 if the Proposed Project is Constructed: Year 2010

In 2010, overall travel delay on Route 101would be expected to be lower if HOV lanes were added than if they were not. Some congested areas are anticipated to persist at certain locations on Route 101 due to the sheer volume of vehicles using the facility as well as development that is expected to occur in Sonoma County by Year 2010. Figure 3.11-3 shows the expected locations and extent of delay in 2010 if HOV lanes are added.

The future-year traffic predictions in Table 3.11-1 show a substantial time savings improvement for the HOV traffic, with a maximum saving of 6.7 minutes (from 7.6 to 0.9) on southbound Route 101 during the PM peak hour when comparing the No-Build and Add HOV Lane scenarios. The table also shows a one-minute increase (from 15.8 to 16.8) in travel delay on the mixed flow traffic lanes during the AM peak hour on southbound Route 101 when comparing the No-Build and Add HOV Lane scenarios. The reason for this minor increase is the increased traffic demand due to the presence of the additional HOV lane. The traffic forecasting model assumes that increased capacity would attract additional traffic from alternative routes, which could lead to increased congestion for the mixed flow lanes



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LEGEND

Congestion Area*

High Occupancy Vehicle Lane

Figure 3.11-3
2010 With Proposed Project Scenario
Route 101 Congestion Analysis

* For congestion analysis, the congestion threshold is reached when demand volumes exceed capacity of 2100 vehicles per hour per lane.

Table 3.11-1. Year 2010 Theoretical Travel Delay on Route 101 Between Route 116 and River Road With and Without HOV Lanes Added in Project Area

Scenario	Maximum AM Delay (in min.)		Maximum PM Delay (in min.)	
	Mixed Flow Traffic	HOV Traffic	Mixed Flow Traffic	HOV Traffic
Year 2010				
Southbound No-Build Scenario	15.8	12.5	8.8	7.6
Southbound with HOV lane added	16.8	8.6	5.2	0.9
Northbound No-Build Scenario	8.4	3.6	6.3	3.8
Northbound with HOV lane added	0.6	0.3	5.3	5.0

Note: HOV lanes already exist between the Wilfred Avenue interchange and the interchange with Highway 12. In this segment, HOV users would benefit from time savings compared to mixed flow traffic in this segment, whether or not the proposed project is built.

For northbound PM travelers, Table 3.11-1 also shows that mixed-flow lanes would benefit if the HOV lane is added. Travel delay is expected to decrease by 7.8 minutes (from 8.4 to 0.6) during the AM peak period for the mixed flow traffic lanes when comparing the No-Build and the proposed project scenarios. On the other hand, northbound delays would be greater for HOV lane users if the additional HOV lane is constructed. The rightmost column of Table 3.11-1 shows that delay is expected to increase by 1.2 minutes (from 3.8 to 5.0) with the additional HOV lane. This minor increase would result from a larger number of vehicles using the freeway because of the increased capacity. The increased travel demand on Route 101 is anticipated to create a traffic bottleneck north of the Mendocino Avenue on-ramp. Congestion associated with this new bottleneck is expected to extend only as far south as the end of the proposed northbound HOV lane.

3.11.2.5 Future Traffic Conditions on Route 101 if the Proposed Project is Constructed: Year 2030

To consider the Build Alternative, Figure 3.11-4 shows the expected locations and extent of delay in 2030 if HOV lanes are added between Route 12 and Bicentennial Way. The future-year predictions in Table 3-11-2 indicate that HOV-lane users could expect no delay between Route 116 and River Road if the proposed project is constructed (assuming all other HOV lane segments in that study area are built). Mixed-lane users could expect a maximum delay ranging from 3.8 minutes,

for northbound travelers in the A.M. peak hour, to 24.5 minutes, experienced by southbound travelers in the P.M. peak.

Table 3.11-2. Year 2030Theoretical Travel Delay on Route 101 Between Route 116 and River Road With and Without HOV Lanes Added

Scenario	Maximum AM Delay (in min.)		Maximum PM Delay (in min.)	
	Mixed Flow Traffic	HOV Traffic	Mixed Flow Traffic	HOV Traffic
Year 2030				
Southbound without added HOV lane	25.1	4.1	35.6	11.7
Southbound with HOV lane added	24.2	0	24.5	0
Northbound without added HOV lane	12.8	6.3	34.5	12.7
Northbound with HOV lane added	3.8	0	20.1	0

Note: Predictions for Year 2030 assume that HOV lanes will exist between the interchange with Route 116 in Cotati and the interchange with Highway 12, and between the Bicentennial Way interchange and the Mark West / River Road interchange. HOV users would benefit from time savings compared to mixed flow traffic in segments with HOV lanes, whether or not the proposed project is built.

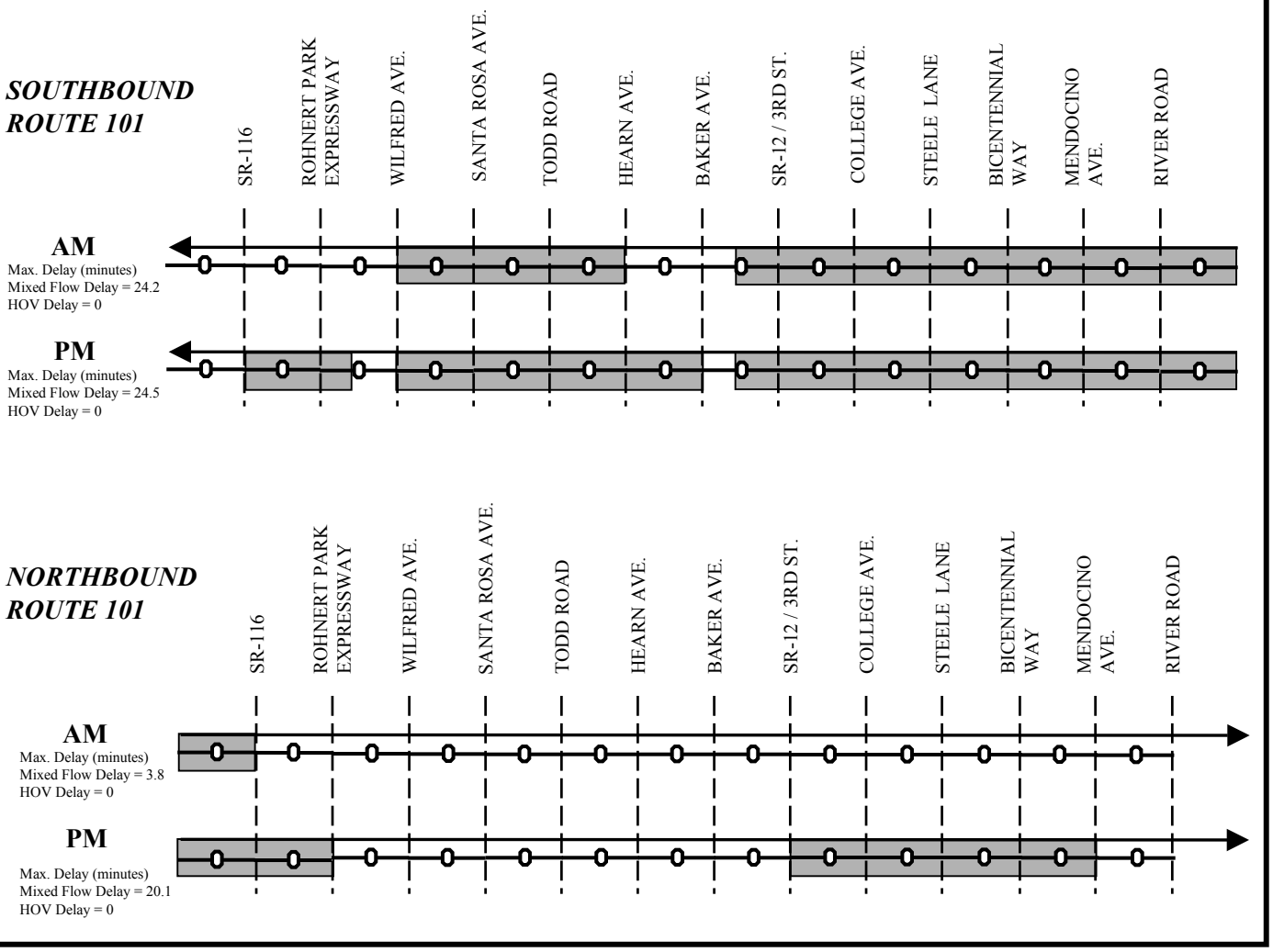
3.11.2.6 Future Intersection Operations

Quality of operation at intersections is expressed as "level of service," or LOS, defined in terms of delay experienced by vehicles. Table 3.11-3 shows LOS definitions for signalized and unsignalized intersections.

Table 3.11-3. Level of Service Definitions

LOS	Unsignalized Intersection Control Delay (seconds/vehicle)	Signalized Intersection Control Delay (seconds/vehicle)
A	Less than 10	Less than 10
B	10 to 15	10 to 20
C	16 to 25	21 to 35
D	26 to 35	36 to 55
E	36 to 50	56 to 80
F	Greater than 50	Greater than 80

Caltrans performed LOS analyses for the selected project area intersections for Year 2000, Year 2010, and Year 2030. The Year 2010 estimates assume completion of the 2001 TIP and 2001 RTP projects, not including the proposed HOV addition between Route 12 and Steele Lane. The Year 2030 estimates assume that those projects are complete, and also that HOV lanes have been added between Rohnert Park Expressway and Old Redwood Highway in Petaluma, and between Windsor River Road and the north end of the proposed project, which is north of the Steele Lane interchange.



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LEGEND

Congestion Area*

High Occupancy Vehicle Lane

Figure 3.11-4
2030 With Proposed Project Scenario
Route 101 Congestion Analysis

* For congestion analysis, the congestion threshold is reached when demand volumes exceed capacity of 2100 vehicles per hour per lane.

According to the transportation section of the 2020 Santa Rosa General Plan, the City strives to maintain LOS D or better along all major corridors. As Table 3.11-4 shows, all study area intersections are currently at LOS D or better. Table 3.11-4 also indicates that Year 2010 LOS at the two intersections would tend to be better if the proposed project is built than for the No Build scenario.

Table 3.11-5 Shows anticipated intersection operations in 2030. As previously discussed, traffic volumes are expected to increase through year 2030, leading to poorer intersection LOS. However, LOS would generally be better if the proposed project is built than for the no build scenario.

Table 3.11-4. Theoretical Year 2010 Peak Hour Intersection LOS With and Without the Proposed Project

Intersection Location	2000 LOS		2010 LOS without Project		2010 LOS with Project	
	AM	PM	AM	PM	AM	PM
College Avenue/northbound Route 101 ramps	C	C	C	C	B	B
College Avenue/southbound Route 101 ramps	C	B	C	B	B	B
Steele Lane/northbound Route 101 ramps	B	D	B	D	C	C
Steele Lane/southbound Route 101 ramps	C	C	C	C	B	C

Table 3.11-5. Theoretical Year 2030 Peak Hour Intersection LOS With and Without the Proposed Project

Intersection Location	2000 LOS		2030 LOS without Project		2030 LOS with Project	
	AM	PM	AM	PM	AM	PM
College Avenue/northbound Route 101 ramps	C	C	E	E	B	B
College Avenue/southbound Route 101 ramps	C	B	D	F	B	D
Steele Lane/northbound Route 101 ramps	B	D	B	F	C	C
Steele Lane/southbound Route 101 ramps	C	C	E	C	D	D

3.11.3 Mitigation Measures

3.11.3.1 Transit Operations

No mitigation required.

3.11.3.2 Bicycle and Pedestrian Facilities

To prevent reduced visibility from affecting safety under the new Santa Rosa Creek Bridge, the pier walls which support the currect bridge structure shortened to near-ground level. The design of the new bridge would provide an obstruction free zone

underneath the bridge, resulting in greater visibility on the proposed bicycle/ pedestrian path. Installation of lighting over the new path would help further promote good visibility.

3.11.3.3 Parking

No mitigation required.

3.12 Visual/Aesthetics

The following discussion describes the visual resources adjacent to Route 101 in the City of Santa Rosa. The project study area includes the freeway right-of-way, areas that are visible from Route 101, and locations outside the freeway right-of-way from which Route 101 can be seen. Buildings and vegetation are the primary factors that control how much of the surrounding area is in view from the freeway and the degree to which Route 101 is visible from adjoining areas of Santa Rosa.

3.12.1 Affected Environment

3.12.1.1 Regional Landscape

The regional landscape traversed by Route 101 is characteristic of the Sonoma Valley area of California. It includes oak-studded hills, vineyards, middle class suburban development, and the urban center of the City of Santa Rosa. Development has increased considerably over the last 25 years, including along the Route 101 corridor, affecting the visual characteristics of the region. Route 101 in Sonoma County is identified as a Scenic Corridor in the Sonoma County General Plan but is not part of the State Scenic Highway system.

Route 101 within the Counties of Marin, Sonoma, Mendocino, Humboldt, and Del Norte became locally known as the "Redwood Highway" as early as the 1920's and was designated by the State legislature as such in 1957. Reflecting this name, redwood trees have been planted in stretches along many miles of Route 101, including within the project area. Redwood trees are characteristic of the Route 101 corridor north of the Golden Gate Bridge.

3.12.1.2 Landscape Character

The character of the landscape in the immediate vicinity of the project is urban. The urban development features a mix of uses including residential, commercial, and institutional. Residential neighborhoods flank the freeway in the central portion of the project area. The historic Railroad Square Preservation District, which includes mostly commercial and a few residential properties, is one block west of the freeway,

while the Santa Rosa Plaza and downtown core are one block to the east. The Burbank Elementary School is adjacent to the freeway near the south end of the project while the Santa Rosa Junior College and Sonoma County Administration Center occupy areas near the northern end. Near the southern limits of the project, the freeway crosses Santa Rosa Creek. As part of the City of Santa Rosa Greenway Project, the linear zone along the creek is being developed as the Prince Memorial Greenway. This greenway site is briefly visible from Route 101 and provides a contrast to the urban character of the adjacent downtown area. The existing four-lane freeway is among the dominant features of Santa Rosa within the project area.

3.12.1.3 Visual Quality

Moderate levels of visual quality exist within the project area. The dominant urban character of the landscape immediately adjacent to Route 101 and sequences of views that occur while traveling on the freeway through the City are pleasant and generally attractive. However, these views are not as scenic as the more rural or undeveloped areas along Route 101 in other parts of Sonoma County. Within the project limits there are no outstanding scenic views or vistas of renowned features, or specific landscape features that would be considered a Scenic Resource.

3.12.1.4 Existing Conditions

Route 101 through Santa Rosa as it exists today was constructed in the late 1950's and early 1960's. It is a four-lane, divided freeway with two travel lanes in each direction. Numerous interchanges serve the city. Within the proposed project limits, existing local access ramps are located at Downtown Santa Rosa (access to 3rd Street and 6th Street), College Avenue, and Steele Lane.

Three soundwalls exist along the east side of the freeway in the vicinity of the Burbank Elementary School, adjacent to Armory Drive from College Avenue northward, and from Bicentennial Way north to the Mendocino Avenue/Old Redwood Highway interchange. On the west (southbound) side of Route 101, one soundwall exists from SR-12 south to Hearn Avenue. The walls on the east side of the freeway were constructed several years ago, while the one on the west side was built recently. The aesthetic treatment for this newer wall was designed to complement the older walls. The walls are made of masonry blocks. Aesthetic treatment consists of the use of colored blocks with textured surfaces that are arranged so as to create a distinctive pattern.

The section of the freeway within the limits of the proposed project is classified by Caltrans as a Landscaped Freeway. Landscaped Freeways meet the landscaping criteria of the Outdoor Advertising Regulations and are used in the control of outdoor

advertising displays along freeways. Freeway landscaping in the proposed project area includes median planting (large shrubs) and planting along the roadside and within interchanges (groundcovers, shrubs, and trees). A total of approximately 18 hectares (45 acres) of freeway landscaping currently exists within the project limits. Approximately 330 redwood trees plus more than 200 other large, mature trees are inside the freeway right-of-way within the proposed project limits. There are also approximately 220 small volunteer oak trees. The small oak trees appear as a mass of brush. A nearly continuous row of large, ornamental shrubs occupies the median from SR-12 northward for approximately 3.2 km (2.0 mi) to a point north of College Avenue between Francis Street and Jennings Avenue, except for approximately 245 m (800 ft) within the viaduct section between 3rd Street and 5th Street. A metal beam guardrail serves as a safety barrier in the median. The median planting occupies a total area of approximately 1.2 hectares (2.9 acres). Substantial roadside landscaping exists along most of the mainline of Route 101 and on both sides of all freeway on and off-ramps within the project limits. An exception is a segment of the mainline between College Avenue and Steele Lane where Armory Drive and Cleveland Avenue are immediately adjacent to the east and west sides of Route 101, respectively, for approximately 0.8 km (0.5 mi). Roadside landscaping in this area is minimal due to the narrow freeway right-of-way and subsequent lack of room for planting. Landscaping in this area consists mostly of vines growing on the right-of-way fence between Route 101 and Armory Drive and vines on fences with some shrubs and very few trees along Cleveland Avenue. Roadside landscaping within the project limits, excluding the Route 101/SR-12 interchange, occupies a total area of approximately 9.1 hectares (22.5 acres). The Route 101/SR-12 interchange contains approximately 7.7 hectares (19.1 acres) of landscaping.

Trees, shrubs, and vines have been planted in conjunction with development beneath the freeway viaduct between 3rd Street and 5th Street. Vines now grow on a substantial portion of the viaduct structures including several of the columns and parts of the sides and underside of the freeway deck. Trees are located along the outer edges of the viaduct and in the space between the two decks at 3rd Street, 4th Street, and 5th Street. They are now tall enough to extend above the deck of the viaduct where motorists, as well as persons at ground level, can easily view them.

Most of the landscaping within the project area was installed in the 1960's. It plays a large role in the overall visual character of Route 101 and in screening views of the surrounding area from the freeway as well as screening or softening views of Route 101 from nearby areas within the City of Santa Rosa.

3.12.2 Environmental Consequences

3.12.2.1 Methodology

Visual impacts of the proposed project were assessed following FHWA guidelines. Existing visual conditions were first analyzed on a regional scale. The project area itself was then examined within the regional context. A survey of public opinion regarding the visual characteristics of Route 101, including freeway landscaping and median planting, was conducted. The survey provided information about the public's attitudes and concerns regarding the visual presence of Route 101 through the city of Santa Rosa. Landscape character and levels of visual quality within the limits of the proposed project were then examined for both pre and post-project conditions. Visual impacts were assessed in terms of the anticipated changes in landscape character and visual quality caused by the project as well as the public's likely response to such changes. Finally, mitigation measures were then recommended to avoid or reduce the severity of impacts. The visual impact assessment process is supported with photographs showing the landscape setting within the project area and computer-generated visual simulations depicting the same views with the proposed project implemented. These simulations are discussed later in this section.

Several locations were used for assessing the visual impacts of the proposed project including points along freeway itself and areas adjacent to the freeway. Together they represent the full range of visual conditions experienced by the various user groups within the project area.

3.12.2.2 Potentially Affected Viewers

Route 101 is the major transportation route between the greater San Francisco Bay Area and the northern coastal region of California; it is also a major local travel route. Consequently, large numbers of people view the proposed project from the freeway itself. People using the freeway include local residents, commuters, truckers, recreational motorists, and tourists. Because Route 101 runs through the City of Santa Rosa, locations near or adjacent to the freeway right-of-way such as residential and commercial areas, public parks, and local public streets offer certain views of the freeway.

Among the different user groups within the project area, local residents, patrons of downtown businesses, tourists, and recreational motorists are considered to have the highest sensitivity to visual resources. Commuters who make frequent, repeat trips and may have a sense of connection with landmarks within the corridor are considered to have a moderate sensitivity. In general, persons employed in commerce or industry within the corridor are considered to have a lower sensitivity to visual resources than other user groups.

Residents of neighborhoods adjacent to the freeway and persons patronizing businesses in the downtown area are especially sensitive to the presence of Route 101 since it passes directly through this area and limits movement between areas east and west of the freeway. The viaduct between 3rd Street and 5th Street serves as a portal for bicyclists/pedestrians and local traffic between the historic Railroad Square Preservation District west of Route 101 and the current downtown center of Santa Rosa east of the freeway. The experience of crossing beneath the viaduct and its influence on people's movement between these areas is an issue of public concern.

The public opinion survey regarding visual resource issues associated with the project produced several findings. Based on the survey, the majority of respondents feel views of Route 101 from residential or downtown areas have a negative influence on the quality of life and that the freeway detracts from the character of Santa Rosa. They also feel freeway landscaping has a positive influence on the attractiveness of the facility and many respondents expressed a desire to see trees along the freeway preserved or more trees planted. Opinion is roughly split as to whether soundwalls have a positive or negative influence on Route 101's attractiveness. Most respondents feel the freeway should be mostly hidden from view from the surrounding community, but are nearly split on whether motorists should be able to view the surrounding community from the freeway.

The City of Santa Rosa adopted Resolution Number 24219, December 7th, 1999, which requests Caltrans staff to provide a more comfortable environment for the proposed project by maximizing the landscaping along creeks and local streets adjacent to Route 101.

3.12.2.3 Effects of the Proposed Project

Changes in Existing Visual Conditions. Inside widening and construction of a concrete median barrier throughout the project limits would require the removal of 100 percent of the median landscaping that extends for approximately 3.2 linear km (2 linear mi) and occupies a total of approximately 1.2 hectares (2.9 acres). Most of the median landscaping consists of a single, tightly spaced row of oleanders, which are large, flowering shrubs. In place of the oleanders, a contrete barrier approximately 80 to 90 cm (32 to 36 in) high would be constructed. Elimination of the existing center gap between bridges and elevated freeway structures would require the removal of trees and shrubs from beneath the structures since daylight would no longer penetrate this area and room for trees would no longer exist.

It is estimated that as much as 80 percent of roadside landscaping along the mainline of Route 101 and along ramps at 3rd Street, 5th Street, College Avenue, and Steele

Lane would be disturbed during construction of the project. This amounts to about 7.2 of 9.1 hectares (18 of 22.5 acres). Approximately 2.2 to 2.4 hectares (5.5 to 6 acres) of landscaping would be permanently lost as a result of the widened Route 101, reconstructed ramps, and soundwall construction. Disturbance in these areas would result in the loss of approximately 230 trees of mature size [trunks greater than 25 cm (10 in) diameter at breast height] including 95 redwoods, 80 oaks, 11 Moraine locust, and 10 sycamores among others as well as ornamental shrubs and ground covers. Additionally, about 220 volunteer oaks of relatively small size [trunks from 2.5 to 25 cm (one to 10 in) in diameter] would be removed. None of these small oaks are visually striking as individual trees. Instead, they form a loose group of shrub-like vegetation among the larger trees along the freeway from College Avenue to 5thStreet primarily in the southbound direction.

At the Route 101/SR-12 interchange, it is estimated that approximately 15 percent of the landscaped areas [less than 1.2 of 7.7 hectares (3 of 19 acres)] could be disturbed during construction of interchange improvements. Disturbance in this area would result in the loss of approximately 65 trees of mature size including 13 redwoods and 22 Monterey pines. Most of these are located along the connector ramp from eastbound SR-12 to southbound Route 101. Approximately 0.5 hectares (1.2 acres) of landscaping at the interchange would be permanently lost.

Widening of the viaduct between 3rd Street and 5th Street would increase the width of the freeway deck by approximately 23 m (75 ft). Presently, daylight entering through the center space that separates the two parallel viaducts illuminates the area beneath the viaduct. Widening would result in the loss of the center space and create a solid concrete surface approximately 42 m (140 ft) wide. The amount of natural light beneath the structure would be substantially reduced. New concrete columns similar to the existing columns would support the new center section and new outside sections. Office and commercial buildings along the west side of Morgan Street would be removed and the existing parking areas would be expanded in their place.

Retaining walls may be needed in some locations to contain fill areas required for outside widening. The walls would likely range in height from about 1 to 3 meters (3 to 10 ft) and could be up to 50 meters (165 ft) or more in length. They may be constructed along the connector ramp from eastbound Route 12 to southbound Route 101, at the northbound off-ramp at 3rdStreet, at the new 6thStreet under crossing, and at the southbound on-ramp at College Avenue. The retaining walls would be relatively minor features of the highway facility.

Soundwall construction would require the removal of freeway landscaping where the walls would be constructed. Generally, trees and shrubs would be removed to provide a minimum 1.5 m (5.0 ft) of clear space and access for construction of the walls, although in some cases a larger area may require disturbance due to local conditions such as steep slopes. For freeway motorists, new soundwalls would constrain views in the same way as existing soundwalls in the northbound direction at the Burbank Elementary School and north of College Avenue. This effect would be experienced when traveling in either direction on Route 101 for approximately 1.1 km (0.7 mi) between 6th Street and College Avenue and approximately 0.3 km (0.2 mi) between Santa Rosa Creek and SR-12. On the backside of sound walls, views from residential properties are likely to be minimally affected. Most of the existing freeway landscaping behind the sound walls would remain and help screen them from view.

Changes in Landscape Character and Visual Quality. Landscape character would be changed and visual quality would be degraded within the project area as a result of the project. These effects are caused primarily by the following:

- Elimination of freeway landscaping, including the loss of approximately 295 large, mature trees as well as ornamental shrubs and ground cover and the permanent loss of landscaped areas including all landscaping in the median.
- Widening of the viaduct between 3rd Street and 5th Street, and the removal of buildings and landscaping and expansion of parking beneath the structure.
- Construction of new soundwalls along Route 101.

The row of oleanders in the median is an aesthetic feature highly visible to motorists. The shrubs screen out views of the opposing lanes and oncoming traffic, thus reducing the amount of the freeway within view to half. Removal of the oleanders would make the appearance of the freeway less attractive and allow the full width of Route 101 to be seen, as is the case north of Steele Lane where a concrete barrier now occupies the median.

The loss of approximately 295 mature trees and other freeway landscaping and approximately 220 relatively small, volunteer oak trees would alter the character of the Route 101 corridor and make its appearance less attractive. The urban setting of the freeway through the city of Santa Rosa heightens the importance of landscaping in softening Route 101's appearance and improving its aesthetic qualities when viewed both from the freeway and nearby areas of the city.

The City of Santa Rosa has been working to improve the bicycle/pedestrian connection between the downtown area and the historic Railroad Square Preservation District. The City is studying an area that includes the freeway viaduct between 3rd Street and 5th Street in conjunction with a federally-funded Downtown Pedestrian Linkage Project along 4th Street. Widening the viaduct and the resulting loss of daylight beneath it, along with the removal of redwood and locust trees from the gap between the divided lanes will create a less-inviting bicycle/pedestrian passage way, altering the character of the area and degrading its visual quality. This will contribute to the sense that Route 101 is a barrier to bicyclists and pedestrians and is out of keeping with the intent of the City's Downtown Pedestrian Linkage Project.

Construction of soundwalls along Route 101 in conjunction with the proposed project would add approximately 1,025 m (3,360 ft) of new soundwalls in the northbound direction and approximately 1,375 m (4,510 ft) in the southbound direction, representing between one-quarter and one-third of the total length of the project area. The visual presence of new soundwalls would contribute to a change in the existing visual character of the freeway corridor, particularly as experienced from Route 101.

Summary of Visual Impacts. Implementation of the proposed project, including: inside widening to create HOV lanes; outside widening to create auxiliary and collector lanes; the construction of soundwalls and retaining walls; and the removal of freeway landscaping to accommodate these features would change the appearance of the project area. The change would be more evident in some areas than others but overall the magnitude of change would be substantial. The project would not create a new source of substantial light or glare. However, through the disturbance and loss of freeway landscaping, widening the viaduct, and construction of new soundwalls, the project would alter the existing visual character and degrade visual quality within the project area.

The following three figures represent the proposed visual changes associated with this project. Figure 3.12-1 shows the proposed changes of Route 101 south of 3rd Street near Burbank Elementary School and the Prince Memorial Greenway. The top two pictures are representative of the existing conditions on Route 101 near the Burbank Elementary School and at the Prince Memorial Greenway. The bottom two pictures show what Route 101 is anticipated to look like after construction of the project is complete. Figure 3.12-2 shows the anticipated visual changes that motorists would see when traveling on 3rd Street in downtown Santa Rosa. All four pictures show before and after project conditions looking in the easterly direction. The left two show Route 101 from a greater distance, while the right two show Route 101 closer up. Figure 3.12-3 shows representative before and after pictures of the new 6th Street under crossing. The top three pictures show the view from Davis Street looking east, while the bottom three pictures show the view from Morgan Street looking west.

3.12.3 Mitigation Measures

In order to reduce the visual impacts of the proposed project, the following mitigation measures would be implemented

To reduce the visual effects of disturbances to freeway landscaping, replacement planting would be provided according to Caltrans standards. Replanting of trees would be maximized along Route 101 where they can be placed without impairing sight distances or encroaching into clear recovery zones.

To reduce the visual impacts of widening the viaduct and to provide a more attractive and comfortable environment for pedestrians and bicyclists, landscaping along the freeway and local streets where they intersect with State right-of-way would be maximized. Architectural features would be incorporated into the design of the widened viaduct structure, walls, and abutments. Lighting features would be provided in bicycle/pedestrian zones along local streets beneath the viaduct. Uses of the area beneath the viaduct that would make it more attractive for pedestrians and bicyclists would be promoted. Bicycle/pedestrian improvements on 3rd Street and 6th Street beneath the viaduct would be developed and constructed to be compatible with the City's Downtown Pedestrian Linkage Project along 4th Street. At the Route 101/College Avenue interchange, College Avenue would be widened to provide ample room for bicycle lanes and sidewalks.

As a replacement for the pedestrian over crossing that would be removed, a new bicycle/pedestrian path would be constructed along the south side of Santa Rosa Creek and beneath Route 101 in conjunction with the City's Prince Memorial Greenway Project. Also, a new bridge with supporting columns over Santa Rosa Creek would be constructed to provide bicyclists and pedestrians with greater visibility and a safer, more comfortable linkage under Route 101.

To reduce the impact associated with the visual presence of new soundwalls, a design would be developed that is appropriate to and complements the project setting. The final design would be developed in consultation with the City of Santa Rosa and local residents. Also, where feasible, vines would be planted and allowed to grow on the walls to help visually integrate them with the overall landscape and to reduce the incidence of graffiti. New retaining walls would be given aesthetic treatment. Such treatments also reduce glare from reflected natural light and headlights. Consideration would be given to applying aesthetic treatment to the concrete median barrier as well.

SONOMA 101 WIDENING

VIEW FROM NORTHBOUND ROUTE 101 NEAR BURBANK ELEMENTARY SCHOOL

EXISTING CONDITIONS*

SIMULATED FUTURE CONDITIONS*

Simulated image shows proposed additional travel lanes, concrete median barrier, removal of highway landscaping where required, removal of pedestian overcrossing, and reconstruction of existing sound wall.

VIEW FROM PRINCE MEMORIAL GREENWAY PARK LOOKING EAST

EXISTING CONDITIONS*

SIMULATED FUTURE CONDITIONS*

Simulated image shows new highway bridge over Santa Rosa Creek, removal of pedestrian overcrossing and addition of new creekside walkway under the highway bridge, reconstruction of existing sound wall, and addition of new sound wall along the west side of Route 101 south of the creek.

* Photo simulations were developed using information available during the project's environmental review phase. Final architectural and aesthetic treatments of highway structures and sound walls have yet to be determined. Final design of highway landscaping has yet to be determined also.

Figure 3.12-1: Existing and Photosimulated Future Views near Burbank Elementary School and Prince Memorial Greenway

Caltrans

AudioVisual Multimedia Graphics CT1179 08/2002

SONOMA 101 WIDENING

VIEW FROM 3RD STREET AT DAVIS STREET LOOKING (FAR EAST)

EXISTING CONDITIONS*

SIMULATED FUTURE CONDITIONS*
Simulated image shows widening of highway viaduct structures, removal of buildings and landscaping from beneath the viaduct, and addition of new landscaping along 3RD Street and highway on-ramp.

VIEW FROM 3RD STREET AT DAVIS STREET LOOKING (NEAR EAST)

EXISTING CONDITIONS*

SIMULATED FUTURE CONDITIONS*
Simulated image shows widening of highway viaduct structures, removal of buildings and landscaping from beneath the viaduct, and addition of new landscaping along 3RD Street.

* Photo simulations were developed using information available during the proje environmental review phase. Final architectural and s treatments of highway structures and sound walls yet to be determined. Fi design of highway landsca has yet to be determined

Figure 3.12-2: Existing and Photosimulated Future Views from 3rd Street at Davis Street.

Caltrans

AudioVisual Multimedia Graphics CT1179 05/2003

SONOMA 101 WIDENING

VIEW FROM 6TH STREET NEAR DAVIS STREET LOOKING EAST

EXISTING CONDITIONS

SIMULATED FUTURE CONDITIONS*
Simulated image shows proposed new 6TH Street undercrossing structure, widening and connection of 6TH Street between Davis and Morgan Streets, bicycle lanes, sidewalks, and landscaping along 6TH Street east of Davis street.

VIEW FROM 6TH STREET NEAR MORGAN STREET LOOKING WEST

EXISTING CONDITIONS

SIMULATED FUTURE CONDITIONS*
Simulated image shows new 6TH Street undercrossing structure, sound wall along east side of Route 101, connection of 6TH Street between Morgan and Davis Streets, bicycle lanes, sidewalks, and landscaping along 6TH Street east of Davis Street

* Photo simulations were developed using information available during the project's environmental review phase. Final architectural and aesthetic treatments of highway structures and sound walls have yet to be determined. Final design of highway landscaping has yet to be determined also.

Figure 3.12-3: Existing and Photosimulated Future Views from 6th Street near Davis and Morgan Streets

Caltrans

3.13 Cultural Resources

An Historic Property Survey Report was prepared in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations [36 CFR §800, December 2000] and the California Environmental Quality Act of 1970 (CEQA; PRC §21000 et seq.). An important step in the identification process is the Caltrans consultation with parties with an interest in the effects of the proposed project on historic properties [36 CFR §800.1 (a)]. Consultation was initiated with the State Historic Preservation Officer (SHPO), for the purpose of requesting concurrence on the FHWA deliniation of the Area of Potential Effect (APE), and an inventory of potential historic properties was then conducted. Historic Properties are those cultural resources that meet criteria of eligibility for listing in the National Register of Historic Places (NRHP) (36 CFR §60). Properties eligible for the NRHP are also eligible for nomination to the California Register (PRC §5024.1). FHWA and Caltrans, in consultation with SHPO and interested parties, determined which properties within the APE met eligibility criteria and would be given further consideration regarding project effects. Please see Appendix A for SHPO consultation correspondence.

3.13.1 Affected Environment

3.13.1.1 Public Participation/Native American Consultation

Public participation and Native American consultation are an essential element of the Section 106 compliance process (36 CFR §800.2). The Native American Heritage Commission (NAHC) was contacted for a search of their Sacred Lands files and for a list of interested Native American groups and individuals in October 1999 and again in June 2000. Letters were sent to groups and individuals named on the list received from the NAHC on November 20, 2000 and to the Dry Creek and Federated Indians of Graton Rancherias again on January 2, 2001. Meetings were held with Native American groups in July 2001, August 2001, and February 2002 to solicit views and information regarding the project impacts. In response to concerns voiced at these meetings, Caltrans sent contact letters to the Cloverdale Rancheria of Pomo Indians and to Stewarts Point Rancheria. Follow-up phone calls to all the groups and individuals originally contacted were placed to give the opportunity for verbal comment and to verify receipt of letters. Because consultation is an ongoing exchange of views and information, those groups who have expressed an interest

would be included in future phases of this project. Consultation would continue throughout the project development process. Table 3.13-1 summarizes Native American involvement for the proposed project.

Table 3.13-1. Summary of Native American Involvement

Group/Individual	Letters Sent	Meetings	Follow-Up Phone Calls	Comments
Dry Creek Rancheria of Pomo Indians	11/20/00, 1/2/01		3/22/02	Beverly Rodriguez: No recollection of letters received. Caltrans faxed over copies for their review.
Federated Indians of Graton Rancheria	11/20/00, 1/2/01, 7/16/01	8/15/01, 1/24/02		Interested in being kept informed regarding this project.
Cloverdale Rancheria	3/11/02			Vicki Macias: Santa Rosa is too far south for them, there are other tribes that are closer. She will take letter before Tribal Council in case they're interested. If anything comes up they will write a letter.
Lytton Band of Pomo Indians	8/2/01	7/24/01, 12/05/01, 2/27/02	6/19/01	Tribal Council urges Caltrans to contact all tribes in county regarding this project; any of them could be involved because, where antiquity is concerned, people traveled all across area.
Stewarts Point Rancheria	3/22/02		4/8/02	Otis Parrish: The Kashaya have no concerns outside of their aboriginal tribal territory. (Will send letter to that effect.)
Ya-Ka-Ama	11/20/00		4/5/02	No comment.
Grant Smith	11/20/00		4/5/02	No comment.

On May 15, 2000 Caltrans initiated public outreach for historic resources in the built environment in the project area. A letter was sent to the Northwest Information Center describing the proposed project and Caltrans' efforts to identify historic properties. The letter requested that the Information Center distribute project and survey information to a number of local agencies, community organizations, and other interested parties in an effort to inform said parties and to elicit responses.

On February 14, 2001 Cultural Resource specialists from the Office of Environmental Analysis presented an overview of the historic architectural survey at a meeting of the City of Santa Rosa Cultural Heritage Board. At this meeting, board members inquired about potential impacts of the project on historic structures and districts in the vicinity of the proposed project. Caltrans staff provided clarification on these issues and an explanation of the environmental review process for this project.

3.13.1.2 Archaeology

Cultural resources are nonrenewable, and their scientific, cultural, and aesthetic values can be impaired by disturbance. To deter vandalism, artifact hunting and other activities that can damage cultural resources, only the generalized locations are given herein. The specific site locations are confidential and are restricted to those with a need to know.

For the purposes of the cultural resources investigation, the archaeological APE was delineated as the largest area expected to be affected by the proposed project. For a more complete understanding of the types of resources that may be affected by the project and to assure that adjacent resources are not inadvertently affected, the study area was expanded to include a 0.8-km (0.5-mi) wide area surrounding the APE. SHPO concurred with the adequacy of the APE on February 28, 2003. A literature/record search was conducted that included review of many archival sources such as archaeological site records; historic, geological and soils maps; and several inventories of historic properties and ethnic sites. A sensitivity study was conducted based on the results of the literature search to further predict archaeological site types that might be located within the project area.

Prehistory. The records search indicated that no prehistoric archaeological sites have been formally recorded within the APE to date. Among the nearby sites that have been recorded, is one site (CA-SON-860/H) containing a prehistoric component. Its recorded boundaries are outside the APE, although, research indicates that the prehistoric element of the site may extend under the freeway within the project APE. In addition, numerous prehistoric cultural materials were identified during monitoring of the 3rd Street underpass in the late 1970s (under Santa Rosa Plaza), very near, but outside the APE. The ethnographic Pomo village site of *Hukabetawi* was reported within the study area, near but outside the southwestern portion of the APE.

The findings most specific to the project APE are the presence of archaeological materials in construction excavations for the 3rd Street underpass and the speculation in previous archaeological surveys and by Anthropological Studies Center, Sonoma State University (ASC) archaeologists that CA-SON-860/H appears to extend further west, under the freeway (into the APE).

3.13.1.3 Architectural History

Historical Resources in the Built Environment. There are numerous buildings within the project area that are old enough to merit review (built more than 50 years ago). As was the case with the archaeological review, an architectural history APE was delineated for the project in consultation with FHWA, and takes into account both direct and indirect effects. SHPO concurred with the adequacy of the architectural APE on February 28, 2003. All buildings within the APE were evaluated for National Register eligibility. The following evaluation criteria are the basis for determining inclusion of a property on the NRHP:

A. Association with events that have made a significant contribution to the broad patterns of our history;
B. Association with the lives of persons significant to our past;
C. Resources that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or that possess high artistic values or that represent a significant and distinguishable entity whose component may lack individual distinction; or
D. Resources that have yielded or may be likely to yield, information important in history or prehistory.

Properties built in 1957 or later were eliminated from formal evaluation using the National Register Criteria (National Parks Service [NPS] 2002).

Of the 194 properties located within the APE for the proposed project, 143 were formally evaluated. The evaluated properties consist of single family residences and commercial structures in an urban setting, including one NRHP listed historic district and two potentially eligible historic districts. The results of the study are as follows:

Seven properties have been determined individually eligible for the NRHP:

- 433 Olive Street (Junius Botts Residence), local level of significance under Criterion C. The period of significance is 1889.
- 35 Sebastopol Avenue (Pacific Tire Sales), local level of significance under Criterion C. The period of significance is 1946-47.
- 203 South A Street (Burbank Elementary School), local level of significance under Criterion C. The period of significance is 1940.
- 120 7th Street/515-521 Davis Street (Residences), local level of significance under Criterion C. The period of significance is 1875-1904.
- 133 7th Street (Residence), local level of significance under Criteria A and C. The period of significance is 1870-76.
- 709 Davis Street (Lincoln School), local level of significance under Criterion C. The period of significance is 1923.
- 560 9th Street (old Saint Rose School), local level of significance under Criterion C. The period of significance is 1931.

One property, the Railroad Square Historic District, is listed on the NRHP under Criterion C; the period of significance is 1888-1923. There are three contributors to the Railroad Square Historic District within the APE:

- 130 4th Street (Whistlestop Antiques)
- 133 4th Street (Mixx)
- 120 5th Street (Tocchini Building)

Two properties, which intersect the APE, have been determined eligible for the NRHP: the Olive Park Historic District and the South Saint Rose Historic District:

- The Olive Park district has been determined eligible at the local level of significance under Criteria A and C. The period of significance is 1891-1926.
    - There are nine contributors to the Olive Park Historic District within the APE:
        - 307 Orange Street (Bollinger House)
        - 306 Orange Street (Residence)
        - 301 Orange Street (Residence)
        - 300 Orange Street (Butler House)
        - 228 Orange Street (Stocking House)
        - 226 Orange Street (William T. Hopper House)
        - 216 Orange Street (Harry Morrow House)
        - 138 Orange Street (John E. Gist House)
        - 310 Buckingham Street (Bertram Bower House)
- One property within the APE has been determined individually eligible for the NRHP and a contributor to the eligible Olive Park Historic District:
    - 331 Orange Street (Pygmalion B&B), local level of significance under Criterion A. The period of significance is 1891.
- The South Street Rose district has been determined eligible at the local level of significance under Criteria A and C. The period of significance is 1890-1920.
    - There are fourteen contributors to the South Saint Rose Historic District within the APE:
        - 700 Morgan Street (Shultz House)
        - 708 Morgan Street (Residence)
        - 714 Morgan Street (Leroy Spooncer House)
        - 722 Morgan Street (Residence)
        - 730 Morgan Street (Residence)
        - 736 Morgan Street (Seymore House)
        - 740 Morgan Street (Residence)
        - 750 Morgan Street (Gibbens House)
        - 511-13 A Street (Residence)
        - 517 A Street (Mary King House)
        - 521 A Street (Residence)

- 525 A Street (Residence)
- 537 A Street (Cornelius Shea House)
- 541 A Street (Residence)

Caltrans has determined that the resources listed above that are eligible for the NRHP are likewise historic resources for the purposes of the CEQA. In addition, 13 resources that do not appear eligible for the NRHP are historic resources under CEQA as contributors to the locally designated Saint Rose "Preservation District":

- 512 Morgan Street
- 516 Morgan Street
- 520 Morgan Street
- 600 Morgan Street
- 608 Morgan Street
- 612 Morgan Street
- 924 Morgan Street
- 940 Morgan Street
- 823 Washington Street
- 831 Washington Street
- 837 Washington Street
- 231 10th Street
- 308 Lincoln Street

The remaining properties within the APE have been determined ineligible for inclusion in the National Register, nor does there appear to be the potential for any other NRHP eligible historic district or historic landscape within the APE. There are 52 properties within the APE, which were constructed in or after 1957 and were treated in accordance with the June 1, 2001 "Interim Policy for the Treatment of Buildings Constructed in 1957 or Later" (Caltrans 2002b). The policy states that "all Caltrans staff who meet the Secretary of the Interior's Professional Qualifications Standards for architectural history are authorized to exclude from study buildings that were constructed in 1957 or later in time, or that appear because of alterations to have been constructed in 1957 or later."

The SHPO has concurred with the above determinations of eligibility, as stated in a letter to FHWA dated February 28, 2003 (see Appendix A of this document).

3.13.2 Environmental Consequences

The implementing regulations for Section 106 of the National Historic Preservation Act (NHPA) identify the following as potential adverse impacts on historic properties that are listed on or eligible for the NRHP:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property that is not consistent with the Secretary of the Interior's Standards and guidelines for the treatment of historic properties (36 CFR 68) (NPS 1983);
- Removal of the property from its historic location;
- Change of the character of the property's use or physical features within the property's setting that contribute to its significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property which causes its deterioration except where such neglect and deterioration are recognized qualities of a property; and
- Transfer, lease, or sale of the property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance [36 CFR §800.5 (a)(2)].

3.13.2.1 Archaeology

Although no archaeological resources have been recorded within the APE, there is a possibility that they exist below the current ground surface. Much of the APE is covered by pavement, structures, buildings or other such hardscape making the soils and any possible deposits inaccessible at the current time.

On December 11, 2003 SHPO concurred in FHWA's finding of no archaeological properties effected. FHWA submitted a discovery plan that SHPO approved on the same date, for the treatment of any unexpected archaeological resources, in the event that any are uncovered during construction. Any archaeological deposits identified would be evaluated for their ability to address important research questions.

3.13.2.2 Architectural History

The following properties, as shown in Appendix I, have the potential to be affected by the proposed project; however, FHWA and Caltrans have concluded that there either would be no effect, or as in the case of Burbank Elementary School, the effect would not be adverse, as follows:

203 South A Street (Burbank Elementary School), Map Reference #37

Burbank Elementary School is located just east of at-grade Route 101. There is an existing at-grade soundwall 150 m long and 4.3 m high (500 ft by 14 ft) located at the right edge-of-pavement adjacent to the school parcel. The existing soundwall would be removed and a new at-grade soundwall constructed. The new wall would be 4.3 m high (14 ft), constructed on top of a retaining wall 1.2 m (4 ft) high, for a total height of 5.5 m (18 ft). The length would be 335 m (1,100 ft), to accommodate a recent property acquisition by the Santa Rosa school district. The soundwall would be located at the proposed edge-of-pavement along a widened section of Route 101 (see Appendix C, Figure C-2). This would require approximately 7.6 m (25 ft) of new right of way from the historic property: a strip of land paralleling the existing right of way line between the state and school property. The total right of way requirement is roughly 1,560 sq m (16,810 sq ft), or 0.4 acres (0.2 hectares) of land.

In applying the Criteria of Adverse Effect [36 CFR §800.5(a)(1)], the effect to the historic property would not be adverse because the new soundwall would not touch, impinge upon, or physically alter contributing elements of the property, nor would it diminish the integrity of the property's setting, which would remain unchanged. Likewise, the view of the historic property from Route 101 would not change. The new soundwall would be higher than the existing one by 1.2 m (4 ft) and longer by 180 m (about 600 ft), but these differences would not diminish the setting of the historic school building, which faces away from the freeway. Moreover, two non-contributing structures - a multi-purpose room (1955) and a portable classroom building (1967) - are sited between the historic school building and the soundwall. The proposed project would not introduce new audible elements, as the property is currently in an urban setting, next to an existing freeway. The new right of way would be acquired from a non-contributing element of the property, a modern playground at the south end of the parcel and would not diminish the integrity of the school's historic setting, feeling, association, workmanship, design, or materials.

The project would not change the character of the property's use or physical features within the property's setting that contribute to its historic significance [36 CFR §800.5(a)(2)(iv)], nor would it introduce visual, audible or atmospheric elements that diminish the character of the historic property's significant features [36 CFR §800.5(a)(2)(v)]. Therefore, FHWA concludes that the changes associated with the proposed project would result in no adverse effects to characteristics of the historic properties that qualify them for inclusion on the NRHP.

120 7th Street/515 Davis Street (Residences), Map Reference #51
133 7th Street (Residence), Map Reference #53
709 Davis Street (Lincoln School), Map Reference #60

The 7th Street properties are one and two story residential buildings located on the west side of elevated Route 101, and west of Davis Street. They face north and south (away from the freeway); mature vegetation and a modern office building block the view of Route 101 from 7th Street. 515 Davis Street is a two-story residence, overlooking Davis Street and, beyond it, the 9th Street off-ramp terminus. Lincoln School is a two-story building located west of Route 101 between 8th Street and 9th Street. The building faces east, with Davis Street and a row of single-story residences between it and the elevated Route 101.

The proposed project would involve widening elevated north- and southbound Route 101 within the existing state right of way, constructing soundwalls, widening the existing southbound off-ramp at 9th Street, and replacing the existing elevated structure at 6th Street with a bridge/under crossing, thereby opening 6th Street (an east/west arterial) to through traffic. Widening Route 101 may also require the removal of dense, mature vegetation along the freeway alignment between 6th Street and 9th Street on the west side and 8th Street and Lincoln Street on the east side. 6th Street, which currently terminates at Route 101 just east of Davis Street, would be connected to Morgan Street and A Street on the east side of Route 101. A soundwall is proposed for the southbound direction, which would be 4.3 m high by 705 m long (14 ft by 2,300 ft), extending from College Avenue to just south of 6th Street. A soundwall is also proposed in the northbound direction, which would be 4.3 m by 405 m (14 ft by 1,330 ft), extending from 8th Street to just south of Lincoln Street. No new right of way is required from historic properties for this portion of the proposed project.

The proposed project would not introduce new audible elements, as the properties are currently in an urban setting, next to an existing freeway, and the significance of the properties is not based on a quiet setting. While removal of the mature vegetation would make Route 101 more visible from parts of Davis Street and 7th Street than it is under current conditions, this is not a new visual element, and the vegetation, planted in the 1960s for freeway landscaping, does not contribute to the significance of the historic properties' setting. If the removal of the vegetation is necessary, project plans include re-landscaping, where feasible.

The proposed project would not change the character of the properties' use or physical features within the properties' setting that contribute to their historic significance [36 CFR §800.5(a)(2)(iv)], nor would it introduce visual, audible or atmospheric elements that diminish the character of the historic properties' significant features [36 CFR §800.5(a)(2)(v)]. Therefore, FHWA and Caltrans conclude that the changes associated with the proposed project would result in no effect to characteristics of the historic properties that qualify them for inclusion on the NRHP.

Railroad Square Historic District Contributors:
130 4th Street (Whistlestop Antiques), Map Reference #40
133 4th Street (Mixx), Map Reference #41
120 5th Street (Tocchini Building), Map Reference #42

The Railroad Square Historic District is located on the west side of elevated Route 101, along Davis Street between 3rd Street and 6th Street. The district contains 26 contributing properties, three of which are located within the APE. The contributing buildings within the APE face north and south (away from the freeway), and are located approximately 55 to 65 m (180 to 210 ft) west of Route 101. They are separated from the elevated freeway by Davis Street, non-historic commercial buildings on the east side of Davis Street, and a vacant lot. The proposed project would widen elevated Route 101 within the existing right of way. No right of way is required from any contributors to the historic property, and no soundwall is proposed at this location.

Widening Route 101 within the existing right of way does not have the potential to change the character of the property's use or physical features within the property's setting that contribute to its historic significance [36 CFR §800.5(a)(2)(iv)], nor would it introduce visual, audible or atmospheric elements that would diminish the character of the historic property's significant features [36 CFR §800.5(a)(2)(v)]. Therefore, FHWA and Caltrans conclude that the proposed project would result in no effect to the characteristics of the Railroad Square Historic District that qualify it for inclusion on the NRHP.

South Saint Rose Historic District Contributors:
700 Morgan Street (Shultz House), Map Reference #113
708 Morgan Street (Residence), Map Reference #114
714 Morgan Street (Leroy Spooncer House), Map Reference #115
722 Morgan Street (Residence), Map Reference #116
730 Morgan Street (Residence), Map Reference #118
736 Morgan Street (Seymore House), Map Reference #119
740 Morgan Street (Residence), Map Reference #120

750 Morgan Street (Gibbens House), Map Reference #121
511-13 A Street (Residence), Map Reference #122
517 A Street (Mary King House), Map Reference #123
521 A Street (Residence), Map Reference #124
525 A Street (Residence), Map Reference #125
537 A Street (Cornelius Shea House), Map Reference #127
541 A Street (Residence), Map Reference #128

The South Saint Rose Historic District is located on the east side of Route 101 between 8th Street and 9th Street, and Morgan Street and A Street. The district consists of 14 contributing buildings, all located within the APE. The buildings are one and two story residences. The eight Morgan Street buildings are oriented to the west, facing Morgan Street and beyond it, Route 101. They are sited approximately 25 m (80 ft) from Route 101, but the view of the freeway is screened by dense, mature vegetation (see Photos 6 and 7). The six A Street buildings face east, away from the freeway. The proposed project would widen the elevated Route 101 within the existing right of way, and a soundwall 4.3 m high by 280 m long (14 ft by 900 ft) is proposed along elevated Route 101. If the soundwall is constructed, this may require the removal of the mature vegetation between the west side of Morgan Street and Route 101.

The proposed project would not introduce new audible elements, as the district is currently in an urban setting, next to an existing freeway, and the significance of the property is not based on a quiet setting. Removal of the mature vegetation would make Route 101 more visible from the eight contributors on Morgan Street than it is currently. Although the setting of the district would be altered, the vegetation removal would not affect elements of the historic properties' setting that contribute to their significance, nor is the vegetation itself, planted in the 1960s as part of freeway landscaping, a contributor to the district. The freeway is not a new visual element, nor would new audible elements be introduced. The view of the district from Route 101 would not perceptibly change; the properties are not visible from the freeway now; and the properties would not be visible if the proposed soundwall is constructed.

The proposed project would not change the character of the property's use or physical features within the property's setting that contribute to its historic significance [36 CFR §800.5(a)(2)(iv)], nor would it introduce visual, audible or atmospheric elements that diminish the character of the historic property's significant features [36 CFR §800.5(a)(2)(v)]. Therefore, Caltrans and FHWA conclude that the proposed project

would result in no effect to the characteristics of the South Saint Rose Historic District that qualify it for inclusion on the NRHP.

Olive Park Historic District Contributors:
331 Orange Avenue (Pygmalion B&B), Map Reference #18
307 Orange Street (Bollinger House), Map Reference #19
301 Orange Street (Residence), Map Reference #20
306 Orange Street (Residence), Map Reference #21
300 Orange Street (Butler House), Map Reference #22
228 Orange Street (Stocking House), Map Reference #23
226 Orange Street (William T. Hopper House), Map Reference #24
216 Orange Street (Harry Morrow House), Map Reference #25
138 Orange Street (John E. Gist House), Map Reference #26
310 Buckingham Street (Bertram Bower House), Map Reference #27

The Olive Park Historic District is located at the interchange of southbound Route 101 and SR-12. Bounded by Route 101 to the east, SR-12 to the south, Santa Rosa Creek to the north, and Olive Street to the west, the district contains 33 contributing buildings, 10 of which are located within the APE. The contributors within the APE are one and one-and-one-half story residences, located adjacent to the freeway. The contributors at 306, 300, 228, 226, 216 and 138 Orange Street back up to the freeway; 310 Buckingham Street faces north with the freeway to the east; 331, 307 and 301 Orange Street face east with Route 101/SR-12 directly to the south. The proposed project would widen Route 101 within the existing right of way, and an at-grade soundwall 4.3 m high by 240 m long (14 ft by 790 ft) is proposed from Santa Rosa Creek to just south of Laurel Street. If the soundwall is constructed, this may require the removal of some of the dense, mature vegetation between Route 101 and the eastern lot lines of 306, 300, 228, 226, 216 and 138 Orange Street that currently serves as a visual buffer between the Olive Park neighborhood and Route 101.

The proposed project would not introduce new audible elements, as the district is currently in an urban setting, next to an existing freeway, and its historical significance is not based on a quiet setting. Removal of part of the mature vegetation along the district's eastern boundary may cause a visual change to the Olive Park Historic District, in that Route 101 would be more perceptible from the historic buildings than it is under current conditions, and the soundwall would be visible. The view of the district from Route 101 would not perceptibly change. The properties are not visible from the freeway now, and would not be visible if the proposed soundwall is constructed. While the setting of the district would be altered, the vegetation removal would not affect elements of the historic properties' setting that contribute to

their significance, nor is the vegetation itself, planted in the 1960s as part of freeway landscaping, a contributor to the district's significance. The freeway is not a new visual element, nor would new audible elements be introduced. If the removal of the vegetation is necessary, project plans include re-landscaping, where possible.

The proposed project would not change the character of the property's use or physical features within the property's setting that contribute to its historic significance [36 CFR §800.5(a)(2)(iv)], nor would it introduce visual, audible or atmospheric elements that diminish the character of the historic property's significant features [36 CFR 800.5(a)(2)(v)]. Therefore, FHWA and Caltrans conclude that the proposed project would result in no effect to the characteristics of the Olive Park Historic District that qualify it for inclusion on the NRHP.

The following properties would not be affected by theproposed project:

433 Olive Street (Junius Botts Residence), Map Reference #9
35 Sebastopol Avenue (Pacific Tire Sales), Map Reference #15
560 9th Street (old St. Rose School), Map Reference #129

433 Olive Street and 35 Sebastopol Avenue are located west of SR-12, near the Route 101 interchange. Old Saint Rose School is located on the east side of the elevated Route 101, at 9th Street and Morgan Street. 433 Olive Street is separated from the freeway by Olive Street, other buildings, and mature vegetation. Chestnut Street and several commercial buildings separate 35 Sebastopol Avenue from the freeway. The proposed project would widen SR-12 within the existing right of way, which may require the removal of some mature vegetation along the right of way. No soundwall is proposed in this vicinity.

Old Saint Rose School is located roughly 90 m (300 ft) from the freeway, where a soundwall is proposed. The two-story building faces south; there are two surface streets (Washington and Morgan), mature vegetation, and a partial block of residential buildings to the west between the property and Route 101.

The view of or from the buildings would not be perceptibly altered, nor would the proposed project change the character of the properties' use or physical features within the properties' setting that contribute to their historic significance [36 CFR §800.5(a)(2)(iv)]. Likewise, it would not introduce visual, audible or atmospheric elements that diminish the character of the historic properties' significant features [36 CFR §800.5(a)(2)(v)]. Therefore, FHWA and Caltrans find that 433 Olive Street, 35

Sebastopol Avenue, and the Old Saint Rose School (560 9th Street) would not be affected by the proposed project.

3.13.3 Mitigation Measures

3.13.3.1 Archaeology

Should archaeological deposits be discovered during construction , data recovery would be undertaken on any deposits determined to be eligible for the National Register.. If unexpected archaeological deposits are discovered during construction, all ground disturbing activities in the vicinity of the find will cease until the find has been evaluated by a qualified archaeologist. If human remains are discovered, all work will cease in the vicinity of the discovery. Human remains will be treated in compliance with all applicable State and Federal Laws.

3.13.3.2 Architectural History

None required.

3.14 Environmental Consequences of the No-Build Alternative

As noted in Section 2.3.1, under the No-Build Alternative, Route 101 would remain in its current configuration and location with no improvement.

Traffic / Transportation. Caltrans estimated future conditions on Route 101 between Route 116 in Cotati and River Road in Fulton, as well as at intersections adjacent to interchanges in the project area. Traffic delays in both the southbound and northbound directions for mixed flow lane users without the project are estimated to exceed 12 minutes during both the AM and PM peak hours in the year 2010. By the year 2030, delays in the southbound direction are projected to be between 25 and 36 minutes for mixed flow traffic in the AM and PM peak hours. Northbound mixed flow drivers are estimated to experience delays of 13 to 35 minutes in the AM and PM peak hours. HOV users would experience lesser, but still lengthy delays, because HOV lanes would exist north and south of the currently considered project area, but would be absent between Route 12 and Steele lane. Estimated conditions for Year 2010 are more fully described in Section 3.11.1.6. Year 2030 estimated conditions are described in Section 3.11.1.7.

Water Quality. Caltrans projects that without the improvements, the freeway contribution to water quality issues would be the same, but with increased traffic. However, Caltrans has characterized the changes which the project is expected to have on water quality; those effects are described in Section 3.1.2.2.

It is reasonable to state that the project would provide a benefit to stormwater quality.. The proposed project would include features with treatment capacity for more surface area than is being contributed by the project. When it leaves the Caltrans bioswale and infiltration basins, the local stormwater flow would have higher quality if the project were built than without it.

Air Quality. Air quality in 2030 will presumably be protected by laws similar to the State and Federal Clean Air Acts. To date, the implementation and enforcement mechanisms for these laws have been successful at meeting the articulated air quality standards.

Analytical methods for small-sized particulate matter, known as PM 2.5, are likely to be available before 2030. EPA plans to designate nonattainment areas for PM 2.5 in 2005. Therefore, PM 2.5 emission as a factor in air quality is expected to be effectively regulated by 2030.

In addition to these features of the regulatory environment, certain aspects of the transportation-related environment can be predicted.

1. Increased Congestion – Without the proposed project, there would be increased congestion in the existing facility in future years. Congestion causes higher emissions of carbon monoxide (CO), and has the potential to cause locally-high concentrations of carbon monoxide.

2. Traffic Redirection – Worsening congestion conditions on Route 101 can be expected to influence more drivers to revert to surface streets. Increased congestion on the local roads has the potential to increase emissions there, with the possibility of causing locally-high concentrations of carbon monoxide.